

IN THE CLAIMS:

1. A regulated dashpot with shock-absorption force controls, for motor vehicles, comprising: at least one flow-regulating system 40 (Fig. 1, spec. page 3, line 8; and Figs. 2-11, spec. page 8, lines 1-5) including at least one shock-absorption component 5, 6 (Fig. 1, spec. page 3, lines 10-25) for a compression phase 6 and decompression phase 5; at least one valve assembly 5, 6, 12, 13 (Fig. 3, Fig. 4, spec. page 4 lines 18-21) with electrically (Fig. 4, spec. page 5, lines 5-7) variable (spec. page 4, lines 25-27) flow resistance regulated by a regulating (spec. page 4, line 25) valve 5, 6; at least one fixed bypass valve 7 (Fig. 1, spec. page 3, lines 12-18) with a non-varying constricted flow cross-section hydraulically and directly paralleling the flow-regulating system 40, whereby said fixed bypass valve 7 has a constant opened flow-through cross-section hydraulically in parallel (Fig. 1, spec. page 3, lines 10-15) with said regulating valve; said at least one flow regulating system 40 for the compression phase 6 and said at least one flow regulating system for the decompression phase 5 being in the form of said regulating valve with variable flow constriction, (Fig. 4, spec. page 4, lines 26-27; valves 5, 6 can switch continuously back and forth between hard and soft) said flow resistance being continuous for providing continuous damping between soft and hard damping, (Figs. 4, 12, 13, spec. page 4, lines 23-27) said bypass valve preventing pressure pulses in damping fluid when said regulating valve transfers rapidly from open to closed positions corresponding to upward wheel shocks and sudden wheel accelerations, so that sudden jolts are prevented when shifting between soft and hard damping (Fig. 4, spec. page 4, lines 23-27) for comfort in riding in said vehicles, said fixed bypass valve 7 being integratable into said flow-regulating system and having minimal passage for hydraulic fluid and preventing the dashpot from being entirely blocked when said regulating valve is closed, said flow-



regulating system for the compression and decompression phases forming main flow channels through said shock-absorption component, said valve assembly 5, 6, 12, 13 with electrically variable flow resistance (Fig. 4, spec. page 3, lines 10-26; spec. page 4, lines 25-27; spec. page 5, lines 5-7) forming a main valve assembly for said shock-absorption component, said fixed bypass valve 7 having a constant non-adjustable flow cross-section.

11. A regulated dashpot with shock-absorption force controls, for motor vehicles, comprising: at least one flow-regulating system 40 (Fig. 1, spec. page 3, line 8; and Figs. 2-11, spec. page 8, lines 1-5) including at least one shock-absorption component 5, 6 (Fig. 1, spec. page 3, lines 10-25) for a compression phase 6 and decompression phase 5; at least one valve assembly 5, 6, 12, 13 (Fig. 3, Fig. 4, spec. page 4 lines 18-21) with electrically (Fig. 4, spec. page 5, lines 5-7) variable (spec. page 4, lines 25-27) flow resistance regulated by a regulating (spec. page 4, line 25) valve 5, 6; at least one fixed bypass valve 7 (Fig. 1, spec. page 3, lines 12-18) with a non-varying constricted flow cross-section hydraulically and directly paralleling the flow-regulating system 40, whereby said fixed bypass valve 7 has a constant opened flow-through cross-section hydraulically in parallel (Fig. 1, spec. page 3, lines 10-15) with said regulating valve; said at least one flow regulating system 40 for the compression phase 6 and said at least one flow regulating system for the decompression phase 5 being in the form of said regulating valve with variable flow constriction, (Fig. 4, spec. page 4, lines 26-27; valves 5, 6 can switch continuously back and forth between hard and soft) said flow resistance being continuous for providing continuous damping between soft and hard damping, (Figs. 4, 12, 13, spec. page 4, lines 23-27) said bypass valve preventing pressure pulses in damping fluid when said regulating valve transfers



rapidly from open to closed positions corresponding to upward wheel shocks and sudden wheel accelerations, so that sudden jolts are prevented when shifting between soft and hard damping (Fig. 4, spec. page 4, lines 23-27) for comfort in riding in said vehicles, said fixed bypass valve 7 being integratable into said flow-regulating system and having minimal passage for hydraulic fluid and preventing the dashpot from being entirely blocked when said regulating valve is closed, said flow-regulating system and flow-shock-absorption component 5, 6 being accommodated in a separate unit in form of a flow regulating block (spec. page 8, lines 16-19) outside the dashpot and communicating with said dashpot through hydraulic-fluid lines; said flow regulating system comprising two hydraulically parallel regulating valves, (Figs. 10, 11 spec. page 4, lines 1-5) said bypass valve 7 being hydraulically in parallel with said two regulating valves and having minimal passage (spec. page 3, line 14) for hydraulic fluid for preventing the dashpot from being entirely blocked while said regulating valves are closed.